

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.



"Welcome Shelter Near Trail's End"

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR OREGON

MARCH 1, 1947

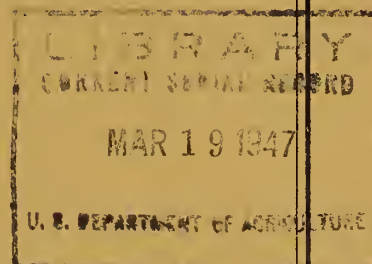
By

Division of Irrigation, Soil Conservation Service

United States Department of Agriculture

and

Oregon Agricultural Experiment Station



Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U. S. Forest Service, National Park Service and other Federal, State and local organizations.

TABLE OF CONTENTS

	<u>Page</u>
Snow-Stored Water, March 1, Map of	Preceding 1
Snow Course Location Map	Preceding 1
Snow Course Index	Back of Snow Course Map
Water Supply Outlook	1
Preliminary Streamflow Forecasts	2
Snow-Stored Water, March 1, Compared with Previous Years	3
Snow-Stored Water, March 1 Status	4-5
Reservoir Water	6
Reservoir Location Map	Preceding 7
Valley Precipitation	7
Snow Survey Measurements	8-14
Cooperators, List of	15

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND IRRIGATION WATER FORECASTS
FOR
OREGON

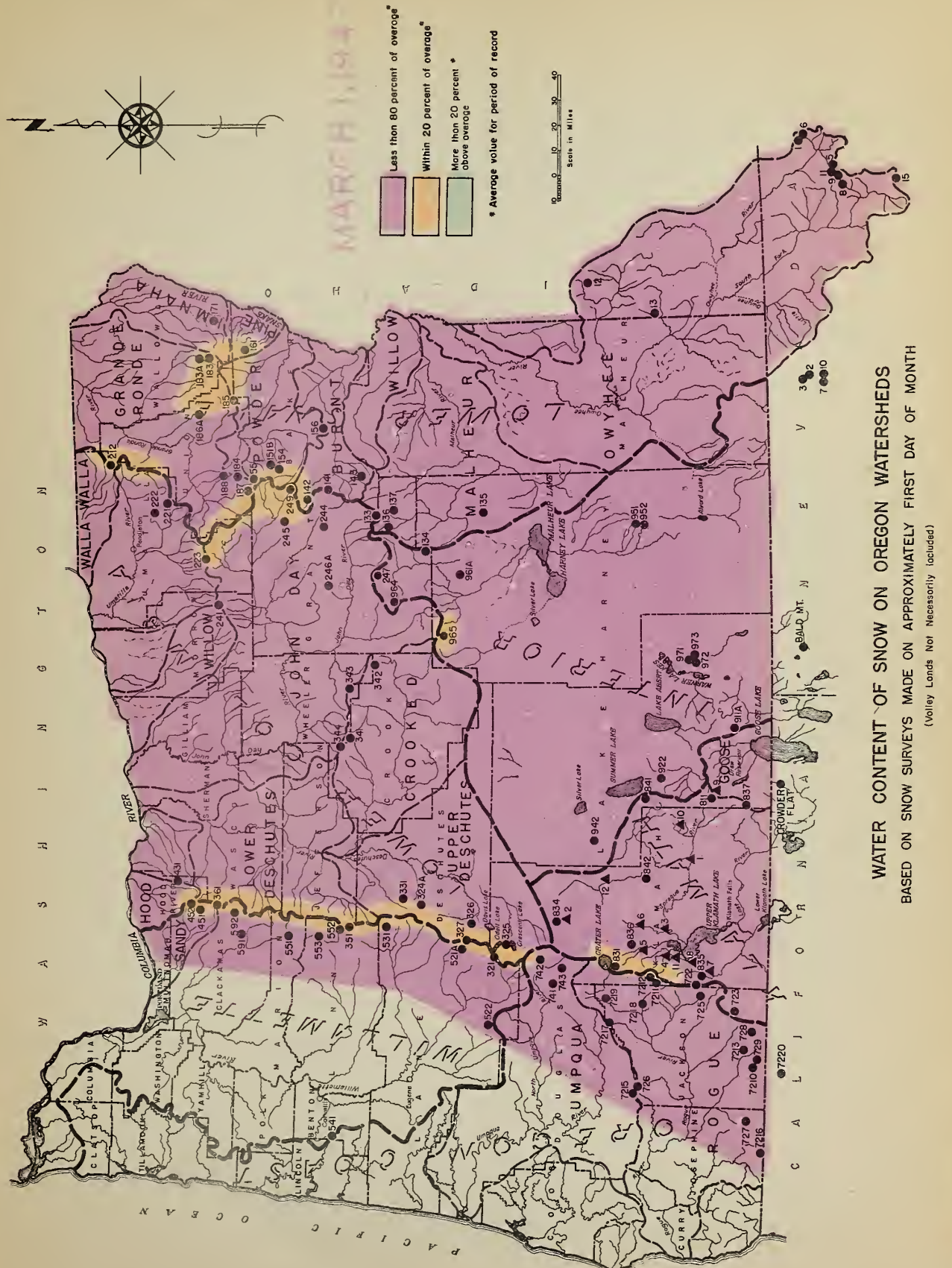
Report Prepared

by

W. T. Frost -- Hydraulic Engineer

Division of Irrigation
Soil Conservation Service
and
Oregon Agricultural Experiment Station
P. O. Box 1149
Hedford, Oregon





WATER CONTENT OF SNOW ON OREGON WATERSHEDS

BASED ON SNOW SURVEYS MADE ON APPROXIMATELY FIRST DAY OF MONTH

(Valley Lands Not Necessarily Included)

INDEX TO SNOW COURSES

Number	Name	Elev.	Number	Name	Elev.	Number	Name	Elev.	Number	Name	Elev.
UPPER COLUMBIA DRAINAGE											
Lower Snake in Oregon											
OWHEE RIVER											
113	Big Bend	6800	212	Tollgate	5070	551	Breitenbush	2325	WILLAMETTE RIVER		
114	Buckskin, Lower	8200				552	Cascade Summit	4880	INTERIOR DRAINAGE		
115	Buckskin, Upper	8200				553	Champion	4500	SILVER LAKE		
116	Fish Creek	7900				554	Hogg Pass	4755	942	Silver Creek	4900
117	Fry Canyon	6800	222	Emigrant Springs	3925	555	McKenzie	4800	CHEWAUCAN RIVER		
118	Gold Creek Ranger Ste.	6600	223	Lucky Strikes	5050	556	Marion Forks	2770	922	Mill Creek	6200
119	Graffiti Peak	6600	224	Lucky Strikes	5050	557	Mary's Peak	3620	HARNEY BASIN		
120	Jack Creek, Lower	7000	225	Meacham	4300	558	Santiam Junction	3990	Deer Creek		
121	Jack Creek, Upper	7800	226	Tollgate	5070	559	Waldo Lake	5500	973		6670
122	Martin Creek	7000				KLAMATH LAKE BASIN					
123	Rodeo Flat	7000	241	Arbuckle Mountain	5400	831	Annie Spring	6018	952	Fish Creek	7900
124	Silver City	6400				722	Billie Creek Divide	6000	971	Hart Mountain	6350
125	Silvies	6900	JOHN DAY RIVER			834	Chemult No. 1	4760	961A	Idylwild Park	5200
126	South Mountain No. 2	6340				Calif.	Crowder Flat	5200	964	Izee Summit	5295
127	Taylor Canyon	5200	241	Arbuckle Mountain	5400	723	Hyatt Prairie Reservoir	4900	951	Silvies	6900
MALHEUR RIVER											
128	Blue Mountain Spring	5900	246A	Beech Creek Summit	4800	835	Lake of the Woods No. 1	4960	247B	Starr Ridge	5150
129	Crane Prairie	5575	133	Blue Mountain Spring	5900	811	Quartz Mountain	5320	WARNER LAKE		
130	Lake Creek	5120	141	Blue Mountain Summit	5098	7211	Seven Lakes No. 1	6800	Camae Creek		
131	Rock Spring	5100	244	Dixie Springs	6650	7212	Seven Lakes No. 2	6200	911A		5720
132	Stinking Water	4800	249	Gold Center	5340	837	Stewberry	5600	GUANO LAKE		
BURNT RIVER											
133	Barney Creek	5950	245	Izee Summit	5295	841	Summer Rim	7200	Bald Mountain		
134	Dooley Mountain	5430	245	Olive Lake	6000	836	Sun Mountain	5300	972	Guano Creek	6480
135	Tipton	5100	965	Snow Mountain	6300	842	Taylor Butte	5100	WEST COAST DRAINAGE		
POWDER RIVER											
136	Anthony Lake	7125	326	Caldwell Ranch	4400	GOOSE LAKE BASIN					
137	Bourne	5800	327	Cascade Summit	4880	911A	Camae Creek	5720	UMPUQUA RIVER		
138	Dooley Mountain	5430	328	Charlton Lake	5750	811	Quartz Mountain	5320			
139	Kilbertson Meadows	5400	361	Clear Lake	3500	837	Stewberry	5600			
140	Gold Center	5340	325	Grescent Lake	4760	INDEX TO THE CALIFORNIA OREGON					
141	Summit Springs	6000	343	Derr	5670	POWER COMPANY SNOW WATER STATIONS					
142	Taylor Green	5740	351	Hogg Pass	4755	KLAMATH LAKE BASIN					
FINE CREEK											
143	Schneider Meadows	5400	344	Marke Creek	4540	1	Beatty	4300			
144			324A	New Dutchman Flat	6400	2	Chemult	4761			
145			341	Ochocho Meadows	5200	3	Chiloquin	4187			
146			965	Snow Mountain	6300	4	Crystal	4200			
147			342	Tamarack	4800	5	Fort Klamath	4150			
148			331	Three Creeks Meadows	5600	6	Kirk	4533			
HOOD RIVER											
149						7	Lake of the Woods	4960			
150						8	Felicien	4200			
151						9	Quartz Mountain	5504			
152						10	Richardson Ranch	4800			
153						12	Yamsey	4600			
CLACKAMAS RIVER											
154						GOOSE LAKE BASIN					
155						9	Quartz Mountain	5504			
156						CLACKAMAS RIVER					
157						361	Clear Lake	3500			
158						452	Phlox Point - Mt. Hood	5600			
159						451	Still Creek	3700			
GRANDE RONDE RIVER											
160						CLACKAMAS RIVER					
161						361	Clear Lake	3500			
162						452	Phlox Point - Mt. Hood	5600			
163						451	Still Creek	3700			
ANEROLD LAKE											
164						CLACKAMAS RIVER					
165						361	Clear Lake	3500			
166						452	Phlox Point - Mt. Hood	5600			
167						451	Still Creek	3700			
GRANDE RONDE RIVER											
168						CLACKAMAS RIVER					
169						361	Clear Lake	3500			
170						452	Phlox Point - Mt. Hood	5600			
171						451	Still Creek	3700			
ANEROLD LAKE											
172						CLACKAMAS RIVER					
173						361	Clear Lake	3500			
174						452	Phlox Point - Mt. Hood	5600			
175						451	Still Creek	3700			
GRANDE RONDE RIVER											
176						CLACKAMAS RIVER					
177						361	Clear Lake	3500			
178						452	Phlox Point - Mt. Hood	5600			
179						451	Still Creek	3700			
ANEROLD LAKE											
180						CLACKAMAS RIVER					
181						361	Clear Lake	3500			
182						452	Phlox Point - Mt. Hood	5600			
183						451	Still Creek	3700			
GRANDE RONDE RIVER											
184						CLACKAMAS RIVER					
185						361	Clear Lake	3500			
186						452	Phlox Point - Mt. Hood	5600			
187						451	Still Creek	3700			
ANEROLD LAKE											
188						CLACKAMAS RIVER					
189						361	Clear Lake	3500			
190						452	Phlox Point - Mt. Hood	5600			
191						451	Still Creek	3700			
GRANDE RONDE RIVER											
192						CLACKAMAS RIVER					
193						361	Clear Lake	3500			
194						452	Phlox Point - Mt. Hood	5600			
195						451	Still Creek	3700			
ANEROLD LAKE											
196						CLACKAMAS RIVER					
197						361	Clear Lake	3500			
198						452	Phlox Point - Mt. Hood	5600			
199						451	Still Creek	3700			
GRANDE RONDE RIVER											
200						CLACKAMAS RIVER					
201						361	Clear Lake	3500			
202						452	Phlox Point - Mt. Hood	5600			
203						451	Still Creek	3700			
ANEROLD LAKE											
204						CLACKAMAS RIVER					
205						361	Clear Lake	3500			
206						452	Phlox Point - Mt. Hood	5600			
207						451	Still Creek	3700			
GRANDE RONDE RIVER											
208						CLACKAMAS RIVER					
209						361	Clear Lake	3500			
210						452	Phlox Point - Mt. Hood	5600			
211						451	Still Creek	3700			
ANEROLD LAKE											
212						CLACKAMAS RIVER					
213						361	Clear Lake	3500			
214						452	Phlox Point - Mt. Hood	5600			
215						451	Still Creek	3700			
GRANDE RONDE RIVER											
216						CLACKAMAS RIVER					
217						361	Clear Lake	3500			
218						452	Phlox Point - Mt. Hood	5600			
219						451	Still Creek	3700			
ANEROLD LAKE											
220						CLACKAMAS RIVER					
221						361	Clear Lake	3500			
222						452	Phlox Point - Mt. Hood	5600			
223						451	Still Creek	3700			
GRANDE RONDE RIVER											
224						CLACKAMAS RIVER					
225						361	Clear Lake	3500			
226						452	Phlox Point - Mt. Hood	5600			
227						451	Still Creek	3700			
ANEROLD LAKE											
228						CLACKAMAS RIVER					
229						361	Clear Lake	3500			
230						452	Phlox Point - Mt. Hood	5600			
231						451	Still Creek	3700			
GRANDE RONDE RIVER											
232						CLACKAMAS RIVER					
233						361	Clear Lake	3500			
234						452	Phlox Point - Mt. Hood	5600			
235						451	Still Creek	3700			
ANEROLD LAKE											
236						CLACKAMAS RIVER					
237						361	Clear Lake	3500			
238						452	Phlox Point - Mt. Hood	5600			
239						451	Still Creek	3700			
GRANDE RONDE RIVER											
240						CLACKAMAS RIVER					
241						361	Clear Lake	3500			
242						452	Phlox Point - Mt. Hood	5600			
243						451	Still Creek	3700			
ANEROLD LAKE											
244						CLACKAMAS RIVER					
245						361	Clear Lake	3500			
246						452	Phlox Point - Mt. Hood	5600			
247						451	Still Creek	3700			
GRANDE RONDE RIVER											
248						CLACKAMAS RIVER					
249						361	Clear Lake	3500			
250						452	Phlox Point - Mt. Hood	5600			
251						451	Still Creek	3700			
ANEROLD LAKE											
252						CLACKAMAS RIVER					
253						361	Clear Lake	3500			
254						452	Phlox Point - Mt. Hood	5600			
255						451	Still Creek	3700			
GRANDE RONDE RIVER											
256						CLACKAMAS RIVER					
257						361	Clear Lake	3500			
258						452	Phlox Point - Mt. Hood	5600			
259						451	Still Creek	3700			
ANEROLD LAKE											
260						CLACKAMAS RIVER					
261						361	Clear Lake	3500			
262						452	Phlox Point - Mt. Hood	5600			
263						451	Still Creek	3700			
GRANDE RONDE RIVER											
264						CLACKAMAS RIVER					
265						361	Clear Lake	3500			
266						452	Phlox Point - Mt. Hood	5600			
267						451	Still Creek	3700			
ANEROLD LAKE											
268						CLACKAMAS RIVER					
269						361	Clear Lake	3500			
270						452	Phlox Point - Mt. Hood	5600			
271						451	Still Creek	3700			
GRANDE RONDE RIVER											
272						CLACKAMAS RIVER					
273						361	Clear Lake	3500			
274						452	Phlox Point - Mt. Hood	5600			
275						451	Still Creek	3700			
ANEROLD LAKE											
276						CLACKAMAS RIVER					
277						361	Clear Lake	3500			
278						452	Phlox Point - Mt. Hood	5600			
279						451	Still Creek	3700			
GRANDE RONDE RIVER											
280						CLACKAMAS RIVER					
281						361	Clear Lake	3500			
282						452	Phlox Point - Mt. Hood	5600			
283						451	Still Creek	3700			
ANEROLD LAKE											
284						CLACKAMAS RIVER					
285						361	Clear Lake	3500			
286						452	Phlox Point - Mt. Hood	5600			
287						451	Still Creek	3700			
GRANDE RONDE RIVER											
288						CLACKAMAS RIVER					
289</											

March 1, 1947

PRELIMINARY WATER SUPPLY OUTLOOK

The outlook for Oregon's 1947 water supplies varies widely through the state from "good" to critically short. Reservoir water supplies are "fair" to "good" due largely to "hold over" from heavy 1946 runoff.

Mountain snow cover, as of March 1, is below average on 92 percent of all measured snow courses in Oregon and on 37 percent of the snow courses now low records of snowfall were established. Water content of the snow above 5000 feet is 66 percent of average and only 46 percent of average below 5000 feet. Even if snowfall greatly above normal occurs during March some parts of the state will probably have short supplies. The Warner Valley and Harney-Malheur Lake Basins will have greatly restricted water supplies as will also the lands not served from reservoirs in the Goose Lake, Silver Lake, Crooked River, and Malheur River areas.

Watershed soils are well saturated under the snow mantle, thus favoring a well sustained runoff from the spring snow-pack. In areas of light snow cover, however, the soils are generally frozen, a condition which usually favors rapid runoff.

Total water stored in all reservoirs is 5 percent less than of similar date last year, 9 percent more than of this date in 1945, 1 percent more than in 1944, and is 4 percent greater than average. 55 percent of important Oregon reservoirs are half full or better.

Precipitation accumulated in Oregon valleys since October 1 is below normal in all parts of the state except the Southeastern range lands, the Blue Mountains, and the Willamette Valley. Greatest deficiency is in the Columbia River wheat and range lands.

Preliminary forecasts of April-September stream flow, based on existing mountain snow cover, and on the assumption that snow cover increase during March will be average, are listed on page 2 of this report. Final 1947 snow surveys and forecasts will be published on the 9th of April.

PRELIMINARY STREAMFLOW FORECASTS, March 1, 1947

The following preliminary runoff forecasts are based on present mountain snow cover and on the assumption that average increase of snow cover will occur during March. Greater or less than average increase in mountain snow cover during March will correspondingly modify these estimates:

BASIN AND STREAM	Apr.-Sept., inc. Streamflow in Thous. A.F.				
	Forecast	Measured	Runoff	10-yr. avg.	
	1947	1946	1945	1944	1936-45
<u>NORTHCENTRAL OREGON</u>					
Hood River, West Fork near Dee	150.0	a	149.8	106.4	136.5
<u>UMATILLA-WALLA WALLA</u>					
Umatilla River at Pendleton	100.0	a	188.7	122.7	152.4
Walla Walla River, S.Fork near Milton	56.0	a	69.8	55.8	62.8
<u>NORTHEASTERN OREGON</u>					
Wallowa R., E.Fk. and Power Plant	13.0	13.3	10.9	8.5	10.1
Hurricane Cr. near Joseph	48.0	a	41.8	32.6	39.4
Lostine River near Lostine	126.0	a	125.6	89.8	110.2
Bear Creek near Wallowa	63.0	a	65.5	55.3	62.6
Grande Ronde River near LaGrande	110.0	a	168.4	93.3	155.0
<u>EASTERN OREGON</u>					
Strawberry Creek near Prairie City	6.0	9.9	8.0	5.1	7.5
Malheur R., Mid.Fk. near Drewsey	30.0	a	80.4	27.2	73.2
Malheur R., N.Fk., at Beulah	28.0	a	53.6	29.9	56.9
<u>HARNEY BASIN</u>					
Silvies River, near Burns	30.0	a	98.6	22.5	84.4
<u>CENTRAL OREGON</u>					
Ochoco Reservoir Net Inflow	2.5	a	29.6	5.3	18.0
Crescent Lake Net Inflow	12.0	a	11.1	9.2	12.7
Odell Creek near Crescent	25.0	a	24.1	20.1	24.4
Tumalo Creek and Col. So. Canal	39.0	a	38.5	30.5	41.8
Squaw Creek near Sisters	45.0	a	38.4	30.6	44.1
<u>SOUTHCENTRAL OREGON</u>					
Deep Creek above Adel	20.0 ^b	a	70.2 ^b	40.1 ^b	62.2 ^b
<u>KLAMATH BASIN</u>					
Upper Klamath Lake Net Inflow	365.0	557.0	409.9	395.9	481.7
<u>SOUTHERN OREGON</u>					
Hyatt Prairie Reservoir Net Inflow	2.0	a	5.8	4.2	5.8
Fourmile Lake Net Inflow	5.0	a	7.3	5.9	6.9
Little Butte Creek, N.Fk., below Fish Lake (Natural Flow)	9.5	a	13.8	11.5	13.3
Rogue River N.Fk. above Prospect	210.0	370.4	295.4	237.3	286.6
Clearwater River above Trap Creek	49.0	65.7	55.5	55.1	56.8
No. Umpqua River below Lake Creek	122.0	179.1	148.6	133.7	145.0
No. Umpqua River at Toketee Falls	280.0	407.3	348.1	295.4	336.8
<u>WILLAMETTE VALLEY</u>					
Willamette River Mid.Fk. at Eula	730.0	a	889.2	555.6	749.4
McKenzie River at McKenzie Bridge	490.0	a	533.9	422.7	512.7
McKenzie River near Vida	1000.0	a	1230.8	862.9	1103.9

a. 1946 Discharge record not available. b. April-June rather than April-Sept.

COMPARISON OF SNOW COVER AS OF MARCH FIRST WITH THAT OF PREVIOUS YEARS

Snow-stored water now present above 5,000 feet:	Snow-stored water now present from 2,000-5,000 feet:
As percent of that present one month ago -- 114	As percent of that present one month ago -- 83
As percent of that present one year ago -- 49	As percent of that present one year ago -- 29
As percent of that present two years ago -- 86	As percent of that present two years ago -- 118
As percent of average -- 66	As percent of average -- 46

Snow water content on 100 percent of all measured courses is less than at this time in 1946, and in 61 percent of the comparisons is less than on about March 1 of 1945. Snow water content on 92 percent of all measured courses is less than average for the period of record.

Given below is a tabulation showing inches snow-stored water for the March 1 record period on thirteen scattered snow courses.

Water Content of Snow (Inches) as of About March 1, 1947												
Stream	Clackamas	Grande Ronde	Powder	John Day-Burnt	John Day-Malheur	Blue Mountain	Ochoco Meadows	Granite Peak	Izec Summit	Tollgate	Walla Walla	Rogue Umpqua
Snow Course	Peavine Ridge	Moss Spring	Eilertson Meadows	Blue Mountain Summit	Blue Mountain Springs							
Year												
1929											5.8*	12.6*
1930											1.4*	5.0*
1931											7.8*	7.9*
1932								16.5			11.9*	15.4*
1933								7.4			12.0*	27.0*
1934								7.2			0.0*	5.4*
1935								11.8			7.6*	8.6*
1936								13.5	11.0		12.5*	52.1
1937								7.9	8.3		11.0	37.8
1938								13.5	6.7		12.5	41.6
1939								12.8	9.1	34.6	8.7	27.8
1940								15.0	5.2	18.1	8.0	10.8
1941								15.7	7.7	15.6	8.4	13.5
1942								13.7	8.8	14.1	10.2	18.0
1943								18.9	12.8	31.9	21.4	31.9
1944								7.4	6.1	19.9	6.1	15.5
1945								11.4	5.8	15.3	5.1	16.2
1946								13.0	9.7	35.5	17.6	29.9
1947								6.8	3.2	19.4	3.3	12.1

Under-scored is least March 1 water content of snow of record period for each snow course shown.
 * From COPCO Water Station. N.R. = No report.

STATUS OF SNOW COVER AS OF MARCH FIRST
Summary of Snow Survey Data
By Watersheds as of About March First

Stream Basin	Number Of Snow Courses Averaged	Average Water Depth in Snow Cover (Inches)			Yrs. of Rec- ord	1947 Snow Water Depth (Inches) as Percent of that in		
		1947	1946	1945		1946	1945	Avg.
Owyhee River	13	3.1	8.3			37		
	13	3.1		8.8			35	
	14	3.5			9.2 (7-16)			38
Malheur River	6	5.1	12.0			42		
	6	5.1		5.9			86	
	6	5.1			9.1 (2-11)			56
Burnt River	4	5.8	13.2			44		
	4	5.8		8.2			71	
	4	5.8			9.1 (2-11)			64
Powder River	3	12.1	19.8			61		
	4	6.9		10.5			66	
	5	11.3			13.6 (7-10)			83
Grande Ronde River	7	19.4	26.2			74		
	6	17.8		13.4			133	
	7	19.4			18.2 (3-10)			106
Walla Walla River	1	19.4	35.5			55		
	1	19.4		15.3			127	
	1	19.4			23.1 (8)			84
Umatilla River	4	8.1	19.3			42		
	4	8.1		9.4			86	
	4	8.1			12.8 (8-10)			63
Willow Creek	1	5.9	14.8			40		
	1	5.9		9.1			65	
	1	5.9			10.5 (6)			56
John Day River	8	6.8	13.7			50		
	9	7.0		8.1			86	
	9	7.0			10.2 (3-11)			69
Deschutes River	5	14.8	28.5			52		
	4	16.2		11.0			147	
	5	14.8			18.2 (1-11)			81
Crooked River	3	1.6	10.1			16		
	3	1.6		4.8			33	
	3	1.6			6.9 (4-11)			23
Sandy River	3	20.9	41.8			50		
	3	20.9		12.4			168	
	3	20.9			22.5 (5-9)			93

(Continued)

Stream Basin	Number Of Snow Courses Averaged	Average Water Depth in Snow Cover (Inches)				Yrs. of Rec- ord	1947 Snow Water Depth (Inches) as Percent of that in		
		1947	1946	1945	Avg. Past Yrs. of Record		1946	1945	Avg.
Clackamas River	1	8.5	19.5				44		
	1	8.5		6.8				125	
	1	8.5			12.8	(9)			66
Willamette River	6	13.3	30.6				43		
	6	13.3		7.1				187	
	6	13.3			16.9	(3-8)			79
Chewaucan River	1	3.9	9.6				41		
	1	3.9		5.9				66	
	1	3.9			6.8	(8)			57
Harney Basin	7	2.8	8.5				33		
	5	4.0		5.6				71	
	7	2.8			7.1	(3-11)			39
Silver Lake Basin	1	0.0	4.1				0		
	1	0.0		0.0				0	
	1	0.0			3.4	(7)			0
Warner Lake	1	3.0	13.0				23		
	1	3.0		8.8				34	
	1	3.0			9.8	(3)			31
Guano Lake	2	0.6	5.4				11		
	1	0.6		3.3				18	
	2	0.6			6.0	(6-7)			10
Umpqua River	2	8.0	33.5				24		
	2	8.0		7.3				110	
	2	8.0			17.5	(8-18)			46
Upper Rogue River	9	11.0	25.8				43		
	9	11.0		9.9				111	
	11	13.4			23.2	(3-15)			58
Applegate River	2	6.6	17.6				38		
	3	8.9		9.7				92	
	3	8.9			17.4	(5-9)			51
Illinois River	2	2.0	12.7				16		
	2	2.0		4.0				50	
	2	2.0			10.9	(5-8)			18
Klamath Lake Basin	17*	6.2	17.9				35		
	16*	6.6		7.1				93	
	20*	8.2			15.6	(2-20)			52
Goose Lake Basin	3*	1.0	11.0				9		
	3*	1.0		7.4				14	
	3*	1.0			7.9	(3-16)			13

*Including Copco water measurement stations.

STATUS OF RESERVOIR STORAGE, March 1, 1947

BASIN AND STREAM	RESErVOIR	USABLE CAPACITY (Thous.A.F.)	THOUS.A.F. IN STORAGE ABOUT MARCH 1.				
			1947	1946	1945	1944	10-yr. avg. 1936-45
UPPER COLUMBIA DRAINAGE							
LOWER SNAKE IN OREGON							
<u>Owyhee</u>	Antelope	36.5	N.R.	N.R.	12.7	1.2	9.4
	Owyhee	715.0	541.6	607.0	501.2	497.2	542.4
<u>Malheur</u>	Warm Springs	191.0	121.2	87.0	65.6	116.1	95.6
	Agency Valley	60.0	43.3	43.7	50.2	43.3	37.0
	Willow Creek	26.0	N.R.	N.R.	N.R.	10.8	4.5
<u>Burnt</u>	Unity	25.2	11.9	11.8	11.7	7.1	9.4
<u>Powder</u>	Thief Valley	17.4	N.R.	17.6	17.4	12.7	14.2
<u>Grande Ronde</u>	Wallowa Lake	40.9	24.8	11.6	10.7	31.2	19.7
LOWER COLUMBIA DRAINAGE							
<u>Umatilla</u>	McKay	74.0	56.7	44.5	39.5	39.1	35.5
	Cold Springs	50.0	43.3	42.0	28.1	39.2	34.7
<u>Deschutes</u>	Ochoco	46.0	26.2	35.2	4.5	22.8	13.7
	Crescent Lake	80.0	50.1	32.4	33.3	54.2	34.3
	Crane Prairie	50.0	40.6	39.6	27.1	46.2	33.2
	Wickiup	180.0	82.8	55.5	54.3	0.0	19.5 ^e
	Rock Creek	1.4	N.R.	1.4	N.R.	0.5	0.5 ^f
<u>Willamette</u>	Cottage Grove	33.1 ^b	9.0	12.0	10.0	7.9	9.6 ^e
	Fern Ridge	101.2 ^b	33.0	31.0	31.0	15.7	33.0 ^g
WEST COAST DRAINAGE							
<u>Rogue</u>	Fish Lake	7.7	4.3	3.9	3.7	7.0	4.7
	Fourmile Lake ^a	16.0	4.8	5.0	7.9	11.8	7.6
	Emigrant Gap	8.2	4.9	8.2	4.8	2.8	5.8
	Hyatt Prairie ^a	16.0	4.8	2.9	3.1	7.0	6.1
<u>Klamath</u>	Upper Klamath	584.0 ^c	324.1	401.1	302.7	355.6	405.3
	Gerber	94.0	36.8	23.2	52.2	45.2	42.2
	Clear Lake	440.2	211.3	244.1	279.7	294.0	205.0
<u>Goose Lake</u>	Cottonwood	4.1	0.8	0.2	1.4	0.3	0.6 ^h
	Drew	62.5	27.4	47.0	41.0	38.8	37.8

N.R.= No report

a = By ditch to Rogue River side
from Klamath drainage.

b = Storage space reserved for flood control

c = Based on gage zero elevation of 4135.0

d = Excl. '36, '42, '45

e = 1943-45

f = 1944 only

g = 1942-45

h = Excl. '37, '38, '42

IMPORTANT OREGON RESERVOIRS



1870

Received of the
Hon. Secy of the Navy
the sum of \$1000
for the purchase of
the ship "Albatross"
for the service of the
U. S. Navy

VALLEY PRECIPITATION^a

DIVISION	CURRENT YEAR		LAST YEAR	
	Oct. 1, 1946 - March 1, 1947		Oct. 1, 1945 - March 1, 1946	
	P	D	P	D
Southeastern	5.0	+0.2	5.68	+0.43
Southcentral	7.3	-2.0	9.70	+1.30
Northcentral	5.7	-1.1	10.18	+2.75
Columbia River	5.4	-2.1	7.88	+0.40
Wallowa Mountains	6.7	-1.0	7.81	-0.58
Blue Mountains	9.8	-0.2	10.59	+0.50
Southern	12.9	-2.9	19.70	+4.29
Willamette Valley	35.9	+1.2	41.55	+7.21

P = Inches Precipitation

D = Inches Departure from Normal

<u>Southeastern:</u>	Southeastern Oregon range lands, Harney and Malheur Counties.
<u>Southcentral:</u>	Southcentral Oregon range lands, Lake County and Klamath County, except the Cascade Mountains.
<u>Northcentral:</u>	Northcentral Oregon wheat and range lands, Crook, Deschutes, Jefferson, Wheeler, and part of Grant Counties.
<u>Columbia River:</u>	Columbia River area, wheat and range lands, Gilliam, Morrow, Sherman, Wasco, and part of Umatilla Counties.
<u>Wallowa Mountains:</u>	Wallowa Mountain area, forest and range lands, Wallowa and part of Baker County.
<u>Blue Mountains:</u>	Blue Mountain forest and range lands, Union and parts of Baker, Grant, and Umatilla Counties.
<u>Southern:</u>	Southern Oregon irrigated section, Jackson and Josephine Counties.
<u>Willamette Valley:</u>	Parts of Polk, Benton, Yamhill, Washington, and Lane; all of Linn, Marion, Clackamas, and Multnomah Counties.

OREGON SNOW SURVEYS, MARCH, 1947

DRAINAGE BASIN and SNOW COURSE	LOCATION			SNOW COVER MEASUREMENTS								
	Number or State	Sec. Twp. Range	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)			Past Record			
						1947	1946	1945				

a - Estimated

* Telegraphic: subject to minor revision

OREGON SNOW SURVEYS, MARCH, 1947

1947

DRAINAGE BASIN and SNOW COURSE	LOCATION			SNOW COVER MEASUREMENTS									
	Number or State	Sec. Twp. Range	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)			Years of Record	Past Record Av. Water Content (Inches)			
						1947	1946	1945					
BURNT RIVER													
Barney Creek	143	16	14S 36E	5950	2-28	18.3	6.7	10.8	4.6	2	7.7		
Blue Mountain Summit	141	6	12S 36E	5098	2-27	15.1	5.2	12.3	7.3	11	8.7		
Dooley Mountain	156	32	11S 40E	5430	2-28	10.6	3.8	12.1	9.4	8	9.5		
Tipton	142	34	10S 35½E	5100	2-24	14.7	7.7	17.6	11.7	4	10.4		
POWDER RIVER													
Anthony Lake	155	18	7S 37E	7125	3-4	70.0	28.8	31.8	-	7	21.8		
Bourne	154	33	8S 37E	5800	3-2	36.4	11.2	-	14.0	10	13.7		
Dooley Mountain	156	32	11S 40E	5430	2-28	10.6	3.8	12.1	9.4	8	9.5		
Eilertson Meadows	151B	18	8S 38E	5400	2-28	12.6	3.6	15.6	7.0	9	11.7		
Gold Center	249	21	9S 36E	5340	3-1	31.2	9.0	-	11.6	7	11.2		
IMMAHA RIVER													
Aneroid Lake No. 1	183	16	4S 45E	7480	3-1	83.1	32.1	36.7	19.7	3	24.4		
Aneroid Lake No. 2	183A	16	4S 45E	7000	3-1	64.1	25.3	28.5	13.6	3	18.5		
Coverdale	171	22	5S 47E	4250	2-23	14.3	4.5	17.4	5.4	2	11.4		
GRANDE RONDE RIVER													
Aneroid Lake No. 1	183	16	4S 45E	7480	3-1	83.1	32.1	36.7	19.7	3	24.4		
Aneroid Lake No. 2	183A	16	4S 45E	7000	3-1	64.1	25.3	28.5	13.6	3	18.5		
Anthony Lake	155	18	7S 37E	7125	3-4	70.0	28.8	31.8	-	7	21.8		
Beaver Reservoir	188	8	5S 37E	5340	3-2	25.8	*8.0	12.8	8.0	8	11.2		
Meacham	221	24&25	1S 35E	4300	2-25	8.5	3.0	14.3	7.2	10	9.4		
Moss Spring	186A	28	3S 41E	5850	2-28	54.8	19.0	24.1	16.8	8	19.4		
Tollgate	212	32	4N 38E	5070	2-25	49.3	19.4	35.5	15.3	8	23.1		

* Telegraphic: subject to minor revision.

OREGON SNOW SURVEYS, MARCH, 1947

DRAINAGE BASIN and SNOW COURSE	LOCATION		SNOW COVER MEASUREMENTS						
	Number or State	Sec. Twp. Range	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)		Past Record Years of Record (Inches)	
						Same Approx. Date	1945		
						1946	1947		
<u>LOWER COLUMBIA DRAINAGE</u>									
WALLA WALLA RIVER									
Tollgate	212	32 4N 38E	5070	2-25	49.3	19.4	35.5	15.3 8 23.1	
UMATILLA RIVER									
Emigrant Springs	222	29 1N 35E	3925	2-25	0.5	0.2	12.7	4.9 10 7.3	
Lucky Strike	223	28 3S 32E	5050	2-24	28.5	9.9	14.6	10.0 8 11.3	
Meacham	221	24&25 1S 35E	4300	2-25	8.5	3.0	14.3	7.2 10 9.4	
Tollgate	212	32 4N 38E	5070	2-25	49.3	19.4	35.5	15.3 8 23.1	
WILLOW CREEK									
Arbuckle Mountain	241	33 4S 29E	5400	2-27	13.6	5.9	14.8	9.1 6 10.5	
JOHN DAY RIVER									
Arbuckle Mountain	241	33 4S 29E	5400	2-27	13.6	5.9	14.8	9.1 6 10.5	
Beech Creek Summit	246A	4 12S 30E	4800	2-28	1.0	0.4	6.8	2.9 10 6.6	
Blue Mountain Springs	133	21 15S 35E	5900	2-27	34.4	10.4	19.6	10.4 11 14.9	
Blue Mountain Summit	141	6 12S 36E	5098	2-27	15.1	5.2	12.3	7.3 11 8.7	
Gold Center	249	21 9S 36E	5340	3-1	31.2	9.0	-	11.6 7 11.2	
Izee Summit	964	28 16S 29E	5293	2-27	11.1	3.2	9.7	5.8 11 8.3	
Olive Lake	245	14 9S 33½E	6000	2-27	45.6	16.7	22.2	12.3 11 15.1	
Snow Mountain	965	1 19S 26E	6300	2-22	33.8	11.1	16.2	10.0 3 10.6	
Starr Ridge	247B	20 15S 31E	5150	2-27	5.4	1.6	8.3	3.4 11 6.0	

1880-1881	1	1881	2	1882
1882-1883	2	1883	3	1884
1884-1885	3	1885	4	1886
1886-1887	4	1887	5	1888
1888-1889	5	1889	6	1890
1890-1891	6	1891	7	1892
1892-1893	7	1893	8	1894
1894-1895	8	1895	9	1896
1896-1897	9	1897	10	1898
1898-1899	10	1899	11	1900
1900-1901	11	1901	12	1902
1902-1903	12	1903	13	1904
1904-1905	13	1905	14	1906
1906-1907	14	1907	15	1908
1908-1909	15	1909	16	1910
1910-1911	16	1911	17	1912
1912-1913	17	1913	18	1914
1914-1915	18	1915	19	1916
1916-1917	19	1917	20	1918
1918-1919	20	1919	21	1920
1920-1921	21	1921	22	1922
1922-1923	22	1923	23	1924
1924-1925	23	1925	24	1926
1926-1927	24	1927	25	1928
1928-1929	25	1929	26	1930
1930-1931	26	1931	27	1932
1932-1933	27	1933	28	1934
1934-1935	28	1935	29	1936
1936-1937	29	1937	30	1938
1938-1939	30	1939	31	1940
1940-1941	31	1941	32	1942
1942-1943	32	1943	33	1944
1944-1945	33	1945	34	1946
1946-1947	34	1947	35	1948
1948-1949	35	1949	36	1950
1950-1951	36	1951	37	1952
1952-1953	37	1953	38	1954
1954-1955	38	1955	39	1956
1956-1957	39	1957	40	1958
1958-1959	40	1959	41	1960
1960-1961	41	1961	42	1962
1962-1963	42	1963	43	1964
1964-1965	43	1965	44	1966
1966-1967	44	1967	45	1968
1968-1969	45	1969	46	1970
1970-1971	46	1971	47	1972
1972-1973	47	1973	48	1974
1974-1975	48	1975	49	1976
1976-1977	49	1977	50	1978
1978-1979	50	1979	51	1980
1980-1981	51	1981	52	1982
1982-1983	52	1983	53	1984
1984-1985	53	1985	54	1986
1986-1987	54	1987	55	1988
1988-1989	55	1989	56	1990
1990-1991	56	1991	57	1992
1992-1993	57	1993	58	1994
1994-1995	58	1995	59	1996
1996-1997	59	1997	60	1998
1998-1999	60	1999	61	2000
2000-2001	61	2001	62	2002
2002-2003	62	2003	63	2004
2004-2005	63	2005	64	2006
2006-2007	64	2007	65	2008
2008-2009	65	2009	66	2010
2010-2011	66	2011	67	2012
2012-2013	67	2013	68	2014
2014-2015	68	2015	69	2016
2016-2017	69	2017	70	2018
2018-2019	70	2019	71	2020
2020-2021	71	2021	72	2022
2022-2023	72	2023	73	2024
2024-2025	73	2025	74	2026
2026-2027	74	2027	75	2028
2028-2029	75	2029	76	2030
2030-2031	76	2031	77	2032
2032-2033	77	2033	78	2034
2034-2035	78	2035	79	2036
2036-2037	79	2037	80	2038
2038-2039	80	2039	81	2040
2040-2041	81	2041	82	2042
2042-2043	82	2043	83	2044
2044-2045	83	2045	84	2046
2046-2047	84	2047	85	2048
2048-2049	85	2049	86	2050
2050-2051	86	2051	87	2052
2052-2053	87	2053	88	2054
2054-2055	88	2055	89	2056
2056-2057	89	2057	90	2058
2058-2059	90	2059	91	2060
2060-2061	91	2061	92	2062
2062-2063	92	2063	93	2064
2064-2065	93	2065	94	2066
2066-2067	94	2067	95	2068
2068-2069	95	2069	96	2070
2070-2071	96	2071	97	2072
2072-2073	97	2073	98	2074
2074-2075	98	2075	99	2076
2076-2077	99	2077	100	2078
2078-2079	100	2079	101	2080
2080-2081	101	2081	102	2082
2082-2083	102	2083	103	2084
2084-2085	103	2085	104	2086
2086-2087	104	2087	105	2088
2088-2089	105	2089	106	2090
2090-2091	106	2091	107	2092
2092-2093	107	2093	108	2094
2094-2095	108	2095	109	2096
2096-2097	109	2097	110	2098
2098-2099	110	2099	111	2100
2100-2101	111	2101	112	2102
2102-2103	112	2103	113	2104
2104-2105	113	2105	114	2106
2106-2107	114	2107	115	2108
2108-2109	115	2109	116	2110
2110-2111	116	2111	117	2112
2112-2113	117	2113	118	2114
2114-2115	118	2115	119	2116
2116-2117	119	2117	120	2118
2118-2119	120	2119	121	2120
2120-2121	121	2121	122	2122
2122-2123	122	2123	123	2124
2124-2125	123	2125	124	2126
2126-2127	124	2127	125	2128
2128-2129	125	2129	126	2130
2130-2131	126	2131	127	2132
2132-2133	127	2133	128	2134
2134-2135	128	2135	129	2136
2136-2137	129	2137	130	2138
2138-2139	130	2139	131	2140
2140-2141	131	2141	132	2142
2142-2143	132	2143	133	2144
2144-2145	133	2145	134	2146
2146-2147	134	2147	135	2148
2148-2149	135	2149	136	2150
2150-2151	136	2151	137	2152
2152-2153	137	2153	138	2154
2154-2155	138	2155	139	2156
2156-2157	139	2157	140	2158
2158-2159	140	2159	141	2160
2160-2161	141	2161	142	2162
2162-2163	142	2163	143	2164
2164-2165	143	2165	144	2166
2166-2167	144	2167	145	2168
2168-2169	145	2169	146	2170
2170-2171	146	2171	147	2172
2172-2173	147	2173	148	2174
2174-2175	148	2175	149	2176
2176-2177	149	2177	150	2178
2178-2179	150	2179	151	2180
2180-2181	151	2181	152	2182
2182-2183	152	2183	153	2184
2184-2185	153	2185	154	2186
2186-2187	154	2187	155	2188
2188-2189	155	2189	156	2190
2190-2191	156	2191	157	2192
2192-2193	157	2193	158	2194
2194-2195	158	2195	159	2196
2196-2197	159	2197	160	2198
2198-2199	160	2199	161	2200
2200-2201	161	2201	162	2202
2202-2203	162	2203	163	2204
2204-2205	163	2205	164	2206
2206-2207	164	2207	165	2208
2208-2209	165	2209	166	2210
2210-2211	166	2211	167	2212
2212-2213	167	2213	168	2214
2214-2215	168	2215	169	2216
2216-2217	169	2217	170	2218
2218-2219	170	2219	171	2220
2220-2221	171	2221	172	2222
2222-2223	172	2223	173	2224
2224-2225	173	2225	174	2226
2226-2227	174	2227	175	2228
2228-2229	175	2229	176	2230
2230-2231	176	2231	177	2232
2232-2233	177	2233	178	2234
2234-2235	178	2235	179	2236
2236-2237	179	2237	180	2238
2238-2239	180	2239	181	2240
2240-2241	181	2241	182	2242
2242-2243	182	2243	183	2244
2244-2245	183	2245	184	2246
2246-2247	184	2247	185	2248
2248-2249	185	2249	186	2250
2250-2251	186	2251	187	2252
2252-2253	187	2253	188	2254
2254-2255	188	2255	189	2256
2256-2257	189	2257	190	2258
2258-2259	190	2259	191	2260
2260-2261	191	2261	192	2262
2262-2263	192	2263	193	2264
2264-2265	193	2265	194	2266
2266-2267	194	2267	195	2268
2268-2269	195	2269	196	2270
2270-2271	196	2271	197	2272
2272-2273	197	2273	198	2274
2274-2275	198	2275	199	2276
2276-2277	199	2277	200	2278
2278-2279	200	2279	201	2280
2280-2281	201	2281	202	2282
2282-2283	202	2283	203	2284
2284-2285	203	2285	204	2286
2286-2287	204	2287	205	2288
2288-2289	205	2289	206	2290
2290-2291	206	2291	207	2292
2292-2293	207	2293	208	2294
2294-2295	208	2295	209	2296
2296-2297	209	2297	210	2298
2298-2299	210	2299	211	2300
2300-2301	211	2301	212	2302
2302-2303	212	2303	213	2304
2304-2305	213	2305	214	2306
2306-2307	214	2307	215	2308
2308-2309	215	2309	216	2310
2310-2311	216	2311	217	2312
2312-2313	217	2313	218	2314
2314-2315	218	2315	219	2316
2316-2317	219	2317	220	2318
2318-2319	220	2319	221	2320
2320-2321	221	2321	222	2322
2322-2323	222	2323	223	2324
2324-2325	223	2325	224	2326
2326-2327	224	2327	225	2328
2328-2329	225	2329	226	2330
2330-2331	226	2331	227	2332
2332-2333	227	2333	228	2334
2334-2335	228	2335	229	2336
2336-2337	229	2337	230	2338
2338-2339	230	2339	231	2340
2340-2341	231	2341	232	2342
2342-2343	232	2343	233	2344

OREGON SNOW SURVEYS, MARCH, 1947

11
17
1

DRAINAGE BASIN and SNOW COURSE	LOCATION		SNOW COVER MEASUREMENTS									
	Number or State	Sec. Twp. Range	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)			Years of Record	Past Record Av. Water Content (Inches)		
						Same Approx. Date	1946	1945				
DESCHUTES RIVER												
Cascade Summit	321	7	23S 6E	4880	No Measurement	40.5	14.0	3	23.0			
Charlton Lake	327	23	21S 6E	5750	2-14	65.1	22.8 ^b	-	-	-	-	
Clear Lake	361	29	4S 9E	3500	2-22	12.5	4.5	15.7	3.1	5	7.7	
Hogg Pass	351	24	13S 7½E	4755	2-28	68.1	30.3	52.4	16.8	6	32.0	
Marks Creek	344	25	12S 19E	4540	2-27	0.0	0.0	6.0	1.0	9	4.8	
New Dutchman Flat	324A	21	18S 9E	6400	2-18	91.8	36.0	-	-	-	-	
Ochoco Meadows	341	21	13S 20E	5200	2-28	10.4	3.2	14.6	8.2	11	9.7	
Rock Creek	362	1	4S 10E	4200	2-27	19.3	9.2	17.7	-	1	17.7	
Snow Mountain	965	1	19S 26E	6300	2-22	33.8	11.1	16.2	10.0	3	10.6	
Tamarack	342	8	15S 25E	4800	2-24	2.0	1.5	9.8	5.1	4	6.3	
SANDY RIVER												
Phlox Point-Mt. Hood	452	6	3S 9E	5600	3-1	102.1	46.0 ^c	76.0	26.8	9	43.5	
Still Creek	451	25	3S 8½E	3700	2-28	29.9	12.2 ^c	33.7	7.3	9	16.2	
CLACKAMAS RIVER												
Peavine Ridge	591	14&15	6S 7E	3500	3-3	23.0	8.5	19.5	6.8	9	12.8	
WILLAMETTE RIVER												
Breitenbush	551	21	9S 7E	2325	2-22	12.2	4.4	5.0	Trace	5	1.6	
Cascade Summit	321	7	23S 6E	4880	No Measurement	40.5	14.0	40.5	14.0	3	23.0	
Champion	522	12	23S 1E	4500	2-28	14.6	5.8	35.2	4.9	8	19.5	
Hogg Pass	351	24	13S 7½E	4755	2-28	68.1	30.3	52.4	16.8	6	32.0	
Marion Forks	553	28	11S 7E	2730	2-28	17.5	7.6	17.4	Trace	6	8.7	
Santiam Junction	552	14	13S 7E	3990	2-28	27.8	12.5	32.8	7.0	6	16.4	
Waldo Lake	521A	15	21S 6E	5500	2-13	58.4	20.1 ^b	-	-	-	-	

b. Mid-month measurement: included for comparison only. c. Accuracy doubtful: being remeasured

OREGON SNOW SURVEYS, MARCH, 1947

DRAINAGE BASIN and SNOW COURSE	LOCATION		SNOW COVER MEASUREMENTS						
	Number or State	Sec. Twp. Range Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)		Years of Record	Past Record	
					1947	Same Approx. Date 1946			
<u>I N T E R I O R D R A I N A G E</u>									
SILVER LAKE									
Silver Creek	942	25&26 29S 13E	4900	2-26	0.0	4.1	0.0	7 3.4	
CHEWAUCAN RIVER									
Mill Creek	922	1 34S 17E	6200	2-27	12.2	9.6	5.9	8 6.8	
HARNEY BASIN									
Deer Creek	973	17 36S 26E	6670	2-27	0.3	8.1	-	6 7.6	
Hart Mountain	971	1 36S 25E	6350	2-27	0.0	0.6	-	7 3.6	
Idylwild Park	961A	33 20S 31E	5200	3-4	7.2	8.6	4.3	11 6.6	
Izee Summit	964	28 16S 29E	5293	2-27	11.1	9.7	5.8	11 8.3	
Rock Spring	134	23 18S 32E	5100	3-1	6.1	8.0	4.7	11 7.1	
Snow Mountain	965	1 19S 26E	6300	2-22	33.8	11.1	10.0	3 10.6	
Starr Ridge	247B	20 15S 31E	5150	2-27	5.4	8.3	3.4	11 6.0	
WARNER LAKE									
Camas Creek	911A	5 39S 21E	5720	2-28	8.2	13.0	8.8	3 9.8	
GUANO LAKE									
Bald Mountain	Nev. 972	17 45N 21E	6720	2-28	5.0	3.1	3.3	7 4.6	
Guano Creek	972	13 36S 25E	6480	3-1	1.5	7.7	-	6 7.3	

OREGON SNOW SURVEYS, MARCH, 1947

DRAINAGE BASIN and SNOW COURSE	LOCATION		SNOW COVER MEASUREMENTS										
	Number or State	Sec.	Twp.	Range	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)			Years of Record	Past Record av. Water Content (Inches)	
								1947	1946 Same Date	Approx. 1945			
WEST COAST DRAINAGE													
UMPQUA RIVER													
Champion	522	12	23S	1E	4500	2-28	14.6	5.8	35.2	4.9	8	19.5	
Diamond Lake	743	29	27S	6E	5315	2-27	26.8	10.1	31.8	9.7	18	15.5	
ROGUE RIVER													
Althouse	7216	17	41S	7W	4400	2-28	0.0	0.0	5.0	0.7	8	4.8	
Annie Spring	831	19	31S	6E	6018	2-28	73.6	29.8	61.2	24.2	13	36.3	
Billie Creek Divide	722	30	36S	5E	6000	2-25	27.7	12.1	29.9	15.2	15	21.8	
Fish Lake	725	3	37S	4E	4865	2-26	7.4	4.0	16.8	4.5	12	12.6	
Grayback Peak	727	9	40S	5W	6000	3-1	12.1	4.0	20.4	7.2	5	17.0	
Hyatt Prairie Reservoir	723	15	39S	3E	4900	2-26	6.7	2.6	13.3	3.7	14	10.2	
Park Headquarters	838	8	31S	6E	6450	3-6	106.9	39.6	66.4	32.1	3	53.6	
Scrapp Mountain (Calif.)	7220	9	47N	10W	6200	2-25	28.4	13.4	-	13.4	5	21.4	
Seven Lakes No. 1	7211	3	34S	5E	6800	2-26	83.1	26.0	-	-	2	46.0	
Seven Lakes No. 2	7212	26	33S	5E	6200	2-26	64.2	23.2	-	-	2	41.0	
Silver Burn	7219	30	30S	4E	3720	3-6	2.6	1.5	17.4	0.8	10	10.1	
Siskiyou Summit	728	17	40S	2E	4630	2-27	0.0	0.0	8.2	0.4	11	6.1	
South Fork Canal	7218	12	33S	3E	3500	3-1	0.0	0.0	4.0	Trace	10	3.7	
Wagner Butte	7213	1	40S	1W	6900	2-27	26.1	9.2	14.9	8.5	9	13.8	
KLAMATH LAKE BASIN													
Annie Spring	831	19	31S	6E	6018	2-28	73.6	29.8	61.2	24.2	13	36.3	
Beatty 2/		22	36S	12E	4300	2-28	0.0	0.0	0.3	0.0	20	0.2	
Billie Creek Divide	722	30	36S	5E	6000	2-25	27.7	12.1	29.9	15.2	15	21.8	
Chemult No. 1	834	21	27S	8E	4760	3-1	6.0	3.3	17.6	5.1	10	10.9	
Chiloquin 2/		34	34S	7E	4187	2-28	0.0	0.0	0.9	0.0	17	1.6	

OREGON SNOW SURVEYS, MARCH, 1947

DRAINAGE BASIN and SNOW COURSE	LOCATION			SNOW COVER MEASUREMENTS									
	Number or State	Sec.	Twp.	Range	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)			Past Record		
								1947	Same Date 1946	Approx. Date 1945			
KLAMATH LAKE BASIN (Cont'd.)													
Crowder Flat (Calif.)		30	47N	11E	5200	2-25	0.0	0.0	5.4	-	6	4.0	
Crystal 2/		26	34S	6E	4200	2-28	0.0	0.0	11.0	2.0	17	8.2	
Fort Klamath 2/		22	33S	7½E	4150	2-28	0.0	0.0	3.3	0.0	20	4.2	
Harriman Lodge 2/		3	36S	6E	4200	2-28	0.0	0.0	4.6	0.2	20	4.2	
Hyatt Prairie Reservoir	723	15	39S	3E	4900	2-26	6.7	2.6	13.3	3.7	14	10.2	
Kirk 2/		1	33S	7E	4533	2-28	Trace	Trace	11.8	0.0	19	6.6	
Lake of the Woods No. 1	835	11	37S	5E	4960	2-28	7.9	2.1	12.7	3.7	10	8.4	
Park Headquarters	838	8	31S	6E	6450	3-6	106.9	39.6	66.4	32.1	3	53.6	
Quartz Mountain	811	2	38S	16E	5320	2-28	0.0	0.0	11.1	4.9	8	6.6	
Quartz Mountain 2/		33	37S	16E	5504	2-28	0.0	0.0	9.0	8.5	16	7.2	
Seven Lakes No. 1	7211	3	34S	5E	6800	2-26	83.1	26.0	-	-	2	46.0	
Seven Lakes No. 2	7212	26	33S	5E	6200	2-26	64.2	23.2	-	-	2	41.0	
Summer Rim	841	15	33S	16E	7200	2-28	31.5	9.8	-	-	7	13.1	
Sun Mountain	836	22	32S	7½E	5350	3-3	46.2	15.4	39.0	13.9	9	24.4	
Yamsey 2/		20	31S	11E	4600	2-28	0.0	0.0	6.2	0.0	18	2.5	
GOOSE LAKE BASIN													
Camas Creek	911A	5	39S	21E	5720	2-28	8.2	3.0	13.0	8.8	3	9.8	
Quartz Mountain	811	2	38S	16E	5320	2-28	0.0	0.0	11.1	4.9	8	6.6	
Quartz Mountain 2/		33	37S	16E	5504	2-28	0.0	0.0	9.0	8.5	16	7.2	

2/ Water content determined by melting one measured sample (The California Oregon Power Co.'s station)

The following organizations cooperate in the Oregon snow survey work:

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and corps of State Watermasters
Oregon State Highway Engineers

FEDERAL

Department of Agriculture
Forest Service
Soil Conservation Service
Department of Commerce
Weather Bureau
Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Indian Service
National Park Service
War Department
Army Engineer Corps

PUBLIC UTILITIES

California-Pacific Utilities Company
Portland General Electric Company
The California Oregon Power Company

MUNICIPALITIES

City of Corvallis
City of LaGrande
City of The Dalles

IRRIGATION DISTRICTS

Associated Ditch Companies
Central Oregon Irrigation District
Deschutes County Municipal Improvement District
Grants Pass Irrigation District
Jordan Valley Irrigation District
Lakeview Water Users Incorporated
Medford Irrigation District
Ochoco Irrigation District
Rogue River Irrigation District
Talent Irrigation District
Vale-Oregon Irrigation District
Warm Springs Irrigation District

PRIVATE CORPORATIONS

Amalgamated Sugar Company

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO



